

Additions to the Opisthobranch Mollusk Fauna of Marin County, California, with Notes on Their Natural History

BY

TERRENCE M. GOSLINER¹

AND

GARY C. WILLIAMS²

(1 Map)

INTRODUCTION

IN A PREVIOUS article (GOSLINER & WILLIAMS, 1970) we set out to list all species of opisthobranch mollusks from Marin County, California, observed from the summer of 1966 through the summer of 1969. Since then, 4 species not previously mentioned have been collected, and another 4 species have been reported from Marin County in the literature. These additional data bring the total number of opisthobranchs observed in Marin County to 75. Observations were made from August, 1969 through May, 1972. As in our preceding paper, an asterisk (*) before a species name denotes an extension of its known range.

New records of previously listed species are as follows:

Anisodoris nobilis (MacFarland, 1905)

Rocky subtidal
Fort Cronkhite, Marin County; Van Damme Cove, Mendocino County

Discodoris heathi MacFarland, 1905

Rocky subtidal
Van Damme Cove, Mendocino County

Hermaeina smithi Marcus, 1961

Mudflats
Drake's Estero, Marin County

Permanent addresses:

¹ 859 Butterfield Road, San Anselmo, California 94960

² 267 Oak Manor Drive, Fairfax, California 94930

Hermisenda crassicornis (Eschscholtz, 1831)

Mudflats
Drake's Estero, Marin County

Phyllaplysia taylori Dall, 1900

Zostera beds
Hog Island, Tomales Bay, Marin County

New records of Marin County opisthobranchs are as follows:

Acanthodoris hudsoni MacFarland, 1905

Rare, rocky intertidal
Duxbury Reef
Vancouver Island, British Columbia, to Gaviota, Santa Barbara County, California

Alderia modesta (Lovén, 1844)

Common, mudflats, found on the xanthophyte *Vaucheria*
Schooner Bay, Drake's Estero
San Juan Islands, Washington, to Elkhorn Slough, California; Europe

Dendronotus iris Cooper, 1862

Seasonally common, mudflats
Lawson's Landing, Tomales Bay
Vancouver Island, British Columbia, to Coronados Islands, Lower California

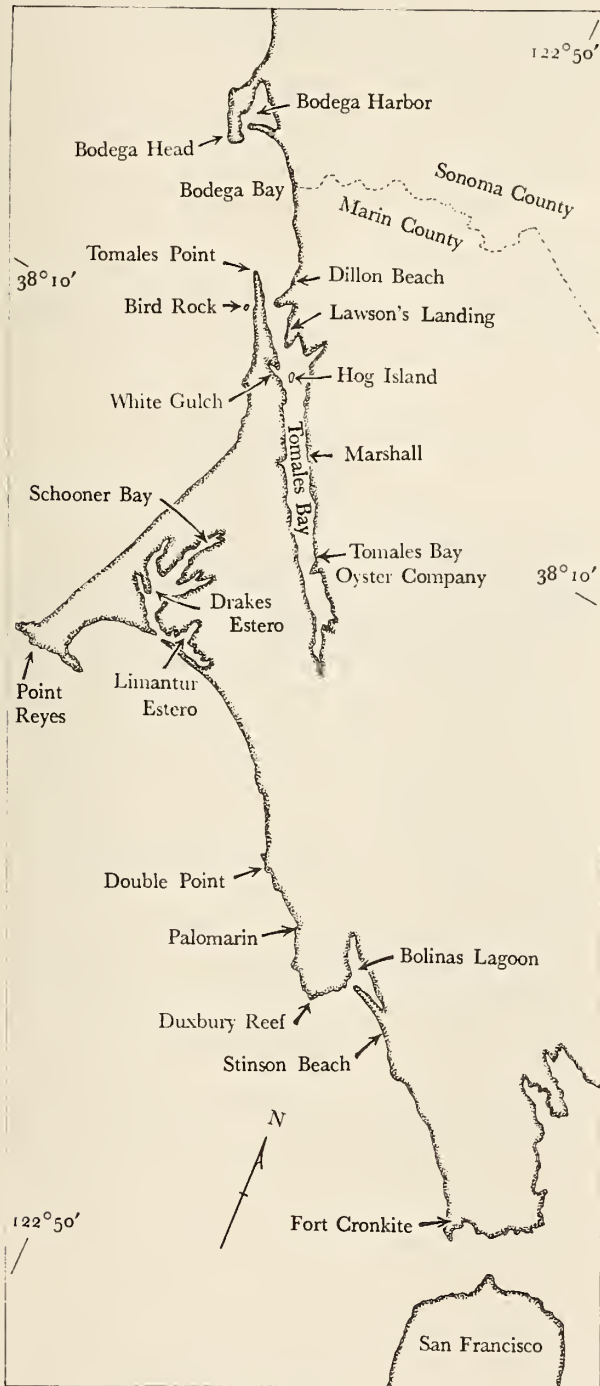


Figure 1

* *Trinchesia virens* (MacFarland, 1966)

Rare, rocky intertidal
 Duxbury Reef
 Duxbury Reef to San Luis Obispo
 (Monterey to San Luis Obispo)

Natural history and habitat of previously unrecorded species:

Dendronotus iris Cooper, 1862

Several animals of *Dendronotus iris* were found at low tide at Lawson's Landing, Tomales Bay, on July 5, 1970. Individuals were found in small pools or along the water's edge, crawling along blades of the eelgrass *Zostera marina* Linnaeus or on the mudflat surface. Numerous egg masses were also present.

It is our opinion that the animals found had migrated from the deeper regions of the bay where their primary food source (as reported by WOBBER, 1970), the burrowing anemone, *Cerianthus*, is commonly dredged. The intertidal region seems to provide a more suitable habitat for spawning. Personal communication with Dr. Gordon L. Chan of the College of Marin's Bolinas Marine Station has revealed that this species has been observed in previous years during the month of July, exhibiting essentially the same behavior. Animals were kept in an aquarium where they frequently exhibited a swimming behavior of rapid lateral bending of the body. FARMER (1970) has noted such behavior in this species as well as in other members of the genus.

Acanthodoris hudsoni MacFarland, 1966

During the midsummer of 1970 several individuals of this phanerobranch dorid were found at Duxbury Reef

GEOGRAPHICAL LOCATIONS

Tomales Bay (mouth)	38°14' N	122°58' W
Lawson's Landing	38°14' N	122°57' W
White Gulch	38°11' N	122°57' W
Hog Island	38°11' N	122°56' W
Marshall Boat Works	38°10' N	122°53' W
Tomales Bay Oyster Company	38°07' N	122°51' W
Schooner Bay	38°05' N	122°56' W
Drake's Estero	38°03' N	122°56' W
Duxbury Reef	37°53' N	122°42' W
Fort Cronkite	37°50' N	122°33' W

in low zone tide pools. Prior to these occurrences we had not observed this species in 4 years of collecting.

Trinchesia virens (MacFarland, 1966)

One individual of this minute aeolid was observed in June, 1970 on the rhodophyte *Iridea* sp. at Duxbury Reef. The species had previously been recorded from Pacific Grove, California (MACFARLAND, 1966) and from Pismo Beach, California (LONG, 1969). The record from Marin County constitutes a northern range extension of slightly more than 100 miles (160 km).

Alderia modesta (Lovén, 1844)

On March 13, 1972, we observed 17 individuals of this small sacoglossan at the northern sector of Schooner Bay, Drake's Estero, on the Point Reyes National Seashore. All of the animals observed were on the xanthophyte *Vaucheria* sp. The species has been reported from many stations along the Pacific coast of North America by HAND & STEINBERG (1955).

Species which have been recorded from Marin County by other authors but were omitted in our earlier paper are:

Armina californica (Cooper, 1862)
in MARCUS, 1961

Rare, subtidal
White Gulch, Tomales Bay
Vancouver Island, British Columbia, to the Gulf of Panama

Elysia hedgpethi Marcus, 1961

Rare, intertidal mudflats
Tomales Bay Oyster Company mudflats
San Juan Island, Washington, to Bahía de los Angeles,
Gulf of California (Mexico)

Polycera hedgpethi Marcus, 1964

Rare, bay boat landings
Marshall Boat Works, Tomales Bay
Tomales Bay to the Gulf of California

Tritonia exsulans Bergh, 1894
in MARCUS, 1961

Rare, subtidal
Tomales Bay
Vancouver Island, British Columbia to Lower California,
Mexico; Florida; Japan

Literature Cited

- FARMER, WESLEY MERRILL
1970. Swimming gastropods (Opisthobranchia and Prosobranchia).
The Veliger 13 (1): 73-89; 20 text figs. (1 July 1970)
- GOSLINER, TERRENCE M. & GARY C. WILLIAMS
1970. The opisthobranch mollusks of Marin County, California.
The Veliger 13 (2): 175-180; 1 map (1 October 1970)
- HAND, CADET & JOAN EMILY STEINBERG
1955. On the occurrence of the nudibranch *Alderia modesta* (Lovén, 1844) on the central Californian coast. The Nautilus 69 (1): 22-28; 1 fig. (July 1955)
- LONG, STEVEN J.
1969. Records of *Trinchesia virens*, *Trinchesia fulgens*, and *Placidia dendritica* from San Luis Obispo County, California. The Tabulata 2 (4): 9-12; 2 figs. (1 October 1969)
- MACFARLAND, FRANK MACE
1966. Studies of opisthobranchiate mollusks of the Pacific coast of North America. Mem. Calif. Acad. Sci. 6: xvi+546 pp.; 72 pls. (8 April 1966)
- MARCUS, ERNST
1961. Opisthobranch mollusks from California. The Veliger 3 (Supplmt. 1): 1-85; pls. 1-10 (1 February 1961)
1964. A new species of *Polycera* (Nudibranchia) from California. The Nautilus 77 (4): 128-131; 4 figs. (April 1964)
- ROLLER, RICHARD A.
1970. A supplement to the annotated list of opisthobranchs from San Luis Obispo County, California. The Veliger 12 (4): 482-483 (1 April 1970)
- WOBBER, DON R.
1970. A report on the feeding of *Dendronotus iris* on the anthozoan *Cerianthus* sp. from Monterey Bay, California. The Veliger 12 (4): 383-387; pls. 55-57 (1 April 1970)

